Using Human Resources Performance Measures

The methodology and measures presented for agency use in this section have been taken from three primary sources:

1. *How to Measure Human Resources Management, 2nd Ed. by Jac Fitz-enz, McGraw-Hill, 1995.*
2. *Accountability in Human Resource Management, by Jack Phillips, 1996.*
3. *Measuring Results: Successful Human Resources Management, National Academy of Public Administration, 1997.*

The 44 measures provided for reference and use do not constitute a one-size fits all measurement checklist that all HR offices in state government should immediately adopt. Instead, they should be viewed as a toolbox that can be used as appropriate to meet the needs of individual agencies. Please review the measurement development and selection processes outlined below before deciding which measure might work best for your agency.

Measurement Development for Your Agency

Principles of Performance Measurement

1. The productivity and effectiveness of any function can be measured by some combination of cost, time, quality, quantity or human relation indices.
2. A measurement system promotes productivity by focusing attention on issues important to the organization.
3. Performance should be measured a both individual and group levels.
4. Managers can be measured by the efficiency and effectiveness of the units they manage.
5. The ultimate measurement is not efficiency, but effectiveness.
6. Effective measures help motivate people and make them feel better about what they are doing and themselves.

Philosophy of Measuring Human Resources

Every organization has a purpose or mission that it is trying to achieve. The job of the Human Resources function is to lead the organization in the acquisition, maintenance, development, supervision and measurement of the human assets and the results of their work (quality, productivity and service).

Therefore, measurement must include a combination of strategic and operational measures that reflect the efficiency and effectiveness of internal processes, customer satisfaction, cost effectiveness and innovation in the organization.

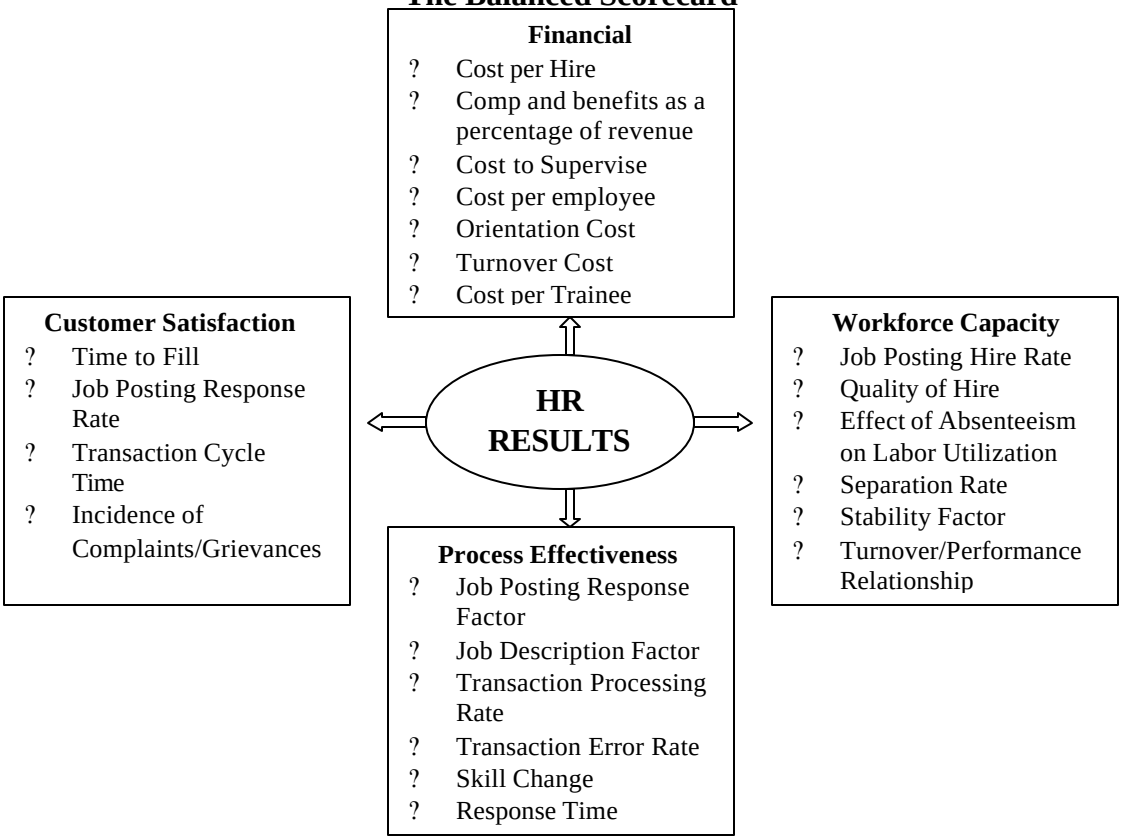
Measurement Framework

The strategic measures selected by your office should reflect the strategic goals of your agency. For example, if a strategic goal of your agency is to provide a high level of customer service to clients or constituents, you may want to look at measures that reflect your recruiting, selection, compensation and development of customer contact personnel.

If your agency has a strategic plan, goals and objectives in the plan should either explicitly state, or at least imply, the strategic human resources objectives for the agency. In an ideal situation, the H.R. Office will also have a business plan that outlines key performance objectives for the human resources function. If such a plan does not exist, you can still develop a measurement system based upon your knowledge of the goals of the agency.

Any measurement system should be balanced in terms of Financial, Customer Satisfaction, Process Effectiveness and Workforce Capacity measures to reflect the total impact of the human resources function. **Figure 1** illustrates a Sample Balanced Scorecard of Measures for Human Resources:

Figure 1
The Balanced Scorecard



Categories of Potential Measures

Whether you plan to use just a few individual measures, or create a balanced scorecard for your human resources organization, you will want to measure several different areas. The measures are divided into three broad categories that cover the major HR functions:

I. The Acquisition of Human Assets
   - ? Recruitment
   - ? Selection

II. The Maintenance of Human Assets
   - ? Compensation and Benefits
   - ? Record Keeping
   - ? Performance Management

III. The Support and Development of Human Assets
   - ? Employee-Relations
   - ? Training and Development

Specific measures included are:

Recruitment

Cost Per Hire

Source Cost Per Hire

Interviewing Cost

Selection

Time to Fill

Time to Start

Job Posting Response Rate

Job Posting Response Factor

Job Posting Hire Rate

Quality of Hire

Compensation and Benefits

Job Description Factor

Job Evaluation Factor

Cost Per Compensation Action

Ratio of Human Resources Staff to Employee Population

Cost to Supervise

Pay and Benefits as a Percent of Total Operating Costs

- Benefit Costs Per Employee
- Workers Compensation and Employee Assistance Program Costs

Record Keeping

- Transaction Processing Rate (Cycle Time)
- Transaction Processing Error Rate
- Cost Per Transaction

Performance Management

- Meets by Default Rate
- Absence Rate
- Absenteeism Costs
- Effect of Absenteeism of Labor Utilization
- Accession Rate
- Separation Rate

Employee Relations

- Workforce Stability and Workforce Instability Factors
- Turnover / Performance Relationships
- Turnover Costs
- Incidence of Complaints or Grievances by Group
- Orientation Costs Per Employee
- Employee Satisfaction
- Employee Suggestions for Improvement
- Employee Recognition Rate

Training and Development

- Cost Per Trainee
- Training Expenditures as a Percentage of Personal Service Expenditures
- Training and Development Plan Factor
- Skill Change Resulting from Training
- Impact and Value Evaluation of Training

Other

- **Overhead**

When developing your scorecard, please also keep in mind that the best scorecards include measures that not only reflect past and current levels of performance, but also measures that help predict future levels of performance. Creating a balance of leading, current and lagging indicators is nearly as important as balancing the measures across functional areas.

Good luck!

Acquisition of Human Assets for the Organization

Measure: Cost per Hire

Formula: $CPH = \frac{Ad + AF + ER + T + Relo + RC}{H} \times 1.10$

Ad= Advertising fees
AF= Agency fees
ER= Employee referrals
T= Travel
Relo= Relocation
RC= Recruiter Costs
H= Number of Hires
10%= All other overhead

Issues to Consider:

1. How much recruitment do you do? For how many different types of positions?
2. What percentage of time is spent by your HR personnel in the recruitment function?
3. How detailed an analysis do you want to do of the costs of recruitment?

Cautions:

1. Allocation of costs for blanket or continuous ads.
2. Identify what you want to consider as cost of recruitment (e.g.) interviewing time in departments

Value of Measure:

? Can help you determine the costs of internal vs. external hires
? Can help allocate recruitment costs by department or unit
? Can help you identify opportunities for savings in the process

What it won't do:

? Provide source analysis
? Tell you which other strategies will be more cost-effective

Measure: Source Cost per Hire

Formula: SCPH = $\frac{AC + AF + RB + NC}{H}$

AC= Advertising Costs **AF= Agency Fees**
RB= Referral Bonuses **NC= No-cost hires***
H= Total hires

***walk-ins, non-solicited applicants, usually equals $0.00**

Issues to Consider:

1. Can use variations to isolate each individual costs such as:
   $\frac{AC}{H}$ $\frac{AF}{H}$ $\frac{RB}{H}$ $\frac{NC}{H}$

2. Can use other variables in the numerator of the equation such as Staff time (ST) or Management time (MT) or Travel (T) for special recruitment programs.

3. Can change the denominator to reflect just exempt hires (EH) or Non-Exempt Hires (NEH) if you want to analyze recruitment source costs for types of hires.

Cautions:

1. Decide what you NEED to measure about you costs first, otherwise you may find yourself doing many useless calculations.

Value of Measure:

? Can determine best use of recruitment dollars
? Allows you to dig deeper into recruitment costs than Cost per Hire

What it won't do:

? Help you choose alternative approaches

Measure: Interviewing Costs

Formula: $C/I = \frac{ST + MT}{I}$

C/I = Cost of Interviewing **ST= Staff Time Costs**
MT= Management Time Costs **I= Number Interviewed**

Issues to Consider:

1. Need to calculate standard labor costs for both staff and management groups first (average salary + benefits + % overhead = $ x.xx/hour)

Cautions:

1. If your agency interviewing process varies from department to department, this calculation could be difficult calculation to reach reliably.

Value of Measure:

? Can help you determine the costs of interviewing and use that data to determine the interviewing cost component of a hire

What it won't do:

? Tell you if your interviewing process is a good one, just how much it costs

Measures: Time to Fill and Time to Start

Formulas: TF = RR – OD
TS = RR – SD

TF= Time to have offer accepted
TS= Time until new hire starts work
RR= Date hire requisition received
OD= Date offer accepted
SD= Date new hire starts work

Issues to Consider:

1. What data is important for you to know?
2. Which calculation works best for your organization's circumstances?

Cautions:

1. You have to have a good logging system for these measures to be accurate.
2. If you use the time to start measure, be sure that everyone understands that the measure begins with the requisition to fill, not the date the job became vacant. Otherwise the perception is that the actual recruitment process takes longer than it actually does.

Value of Measure(s):

? Can be the beginning of a process improvement effort, especially if you choose to break down the component steps of the recruitment process to further analyze the cycle time
? Helps identify the value of lost time due to vacancy, especially if you know staff and management cost factors (TF x MT or ST where MT = Management time and ST =Staff time)

What it won't do:

? Tell you why it takes the time it does to recruit
? Be helpful if your managers don't care how long it takes to recruit a new employee after a requisition is made to fill the position

Measures: Job-Posting Response Rate
Job Posting Response Factor
Job Posting Hire Rate

Note: You should choose the most help of these measures for you agency. Using all three would be redundant.

Formulas: JPR = $\frac{A}{PJ}$ JPRF = $\frac{PJR}{PJ}$ JPH = $\frac{H}{PJ}$

JPR= Job Posting response rate
A= # of applications received
JPRF= ratio of jobs posted to those responded to
PJ= # of posted jobs
PJR= # of posted jobs responded to
JPH= % of jobs filled through posting
H= # of hires made

Issues to Consider:

1. The response rate yields a simple measure off applications per job posted, but it can easily be broken down into categories of jobs or levels of jobs.
2. The job posting response factor gives you a picture of the spread of responses. From this you can learn, for example, "what % of jobs receive at least 10 applicants"?
3. The job posting hire rate can tell you what percentage of jobs posted end up in a hiring. You can also add a time factor, such as "within 60 days" to this for further analysis.

Cautions:

1. Count applications, not applicants for best results.

Value of Measure:

? Can be an advance indicator of organizational problems if applications drop, especially if internal applications drop
? Gives you information on the effectiveness of your posting system

What it won't do:

? Tell which jobs get the most applications, which is a logging task that must be done independently.

Measure: Quality of Hire

Formula: $QH = \frac{PR + HP + HS^*}{N}$

*** Additional indicators specific to your organization can be added here to customize the measure**

QH= Quality of Hire
PR= Average job performance rating of new hires
HP= % of new hires promoted within X period of time
HS= number of indicators used

Issues to Consider:

1. Once the figure is calculated, it will be up to the interpretation of the evaluator to determine if the figure represents high, medium or low quality. Comparisons can be made over time (trends), or against preset standards or management targets.
2. Another way is to interview managers about the quality of the hire on some scale. It is less objective, but may still be valid. A simpler approach may be to evaluate the quality of hire by the percentage of preferred qualifications the hire possesses.

Cautions:

1. Requires a good bit of data gathering and analysis on the part of the H.R department.
2. It is subject to rater variation on performance appraisals when comparisons are made across work units.
3. This is a lagging measure of quality.

Value of Measure:

? Gives the organization a sense of the quality of the recruitment and selection process
? This provides a good measure of the effect of the recruitment and selection process on the organization

What it won't do:

? Tell you why the employee was or was not a good hire. Many factors after selection can influence that assessment.

Maintaining Human Assets in the Organization

Measure(s) : Job Description Factor
Job Evaluation Factor

Formula(s): JDF=$\frac{JD}{J}$ JEF=$\frac{JE}{J}$

JDF= % of jobs that have formal, current job descriptions
JD= number of jobs with current descriptions
JEF= % of jobs that have been evaluated and leveled*
JE= number of jobs evaluated and leveled
J= total number of jobs

* "Leveled" includes verification of both the classification and pay range for an evaluated job.

Issues to Consider:

1. With team structures and other job trends, job descriptions are changing constantly. It is very important to keep them up-to-date. These measures help track progress to that end.
2. Auditing job descriptions is just the first step in keeping the compensation system current (leveled). Periodically, the new descriptions should be reviewed and evaluated.
3. Standards can be established for currency of the descriptions and evaluations.

Cautions:

1. This is a very time consuming process. However, if neglected, it can cause serious retention and recruitment problems for the organization.

Value of Measures:

- Illustrates the currency of the job and salary structure in the organization
- Is a proactive measure, a leading indicator of other potential problems, such as retention or recruitment

What it won't do:

- Highlight exceptions or anomalies in the salary structure. Only looking for exceptions can do this (for example: # at maximum of the grade).

Measure: Cost per Compensation Action

Formula: $CCA = \frac{ST + OH + MT}{TA}$

CCA= Cost per compensation action
ST= Staff time, salary and benefits spent on compensation actions
OH= Overhead costs
MT= Management review time
TA= Total actions

Issues to Consider:

1. The appropriate percentage of HR staff time spent on compensation actions must be calculated from observation, time sheet or interviewing estimates.
2. Management review time should include all approval stages in your agency.

Cautions:

1. Overhead includes cost related to rent, telephones, and other fixed costs that the staff uses to do their jobs. To get more explanation on the concept of "overhead" see page 40.

Value of Measure:

? Helps determine the cost of managing the compensation function in the agency.

What it won't do:

? Tell you anything about appropriateness of actions or the error rate of compensation actions. Delegation audit findings can help with both of these measures.

Measure: Ratio of Human Resources Staff to Employee Population

Formula: RHRS= $\frac{\text{HRS}}{\text{TS}}$

RHRS= Ratio of human resources staff
HRS= Number of human resources staff, including administrative staff
TS= Total number of agency personnel

Issues to Consider:

1. A simple measure that can be used for comparative purposes, especially in conjunction with transaction cost figures.

Cautions:

1. Can be a deceptive measure in some agencies because not all agencies provide the same internal services and others split positions between HR and other duties.
2. Should be compared to a range of acceptable ratios rather than the average ratio in other similar sized organizations.

Value of Measure:

? Provides you a sense of the efficiency of the human resources function.

What it won't do:

? Tell you what the ratio should be for your agency and the services delivered.

Measure: Cost to Supervise

Formula: $SC = \frac{TSS}{TS}$

SC= Supervision Costs
TSS= Total salaries paid to supervisors
TS= Total wages and salaries paid

Issues to Consider:

1. A decision needs to be made about who falls into the supervisory category. Reviewing an organization chart, or doing an analysis of the positions in the organization can do this for you.
2. You also need to decide if you want to include benefit costs in the equation.
3. Flatter organizations typically have lower supervisory costs than more hierarchical organizations.

Cautions:

1. You cannot simply use all "Band 6 or Band 7" or above positions for calculation purposes. However, you may be able to use an HRIS analysis report generated according to job code.
2. Keep your organization's size and location factors in mind when analyzing the data, especially when performing comparisons with other organizations.

Value of Measure:

? Provides you a sense of the cost associated with various levels of management within the agency

What it won't do:

? Tell you what the optimum level of supervisory cost is for your agency

Measure: Pay and Benefits as a Percent of Total Operating Costs

Formula: PBCF = $\frac{P + BC}{TOC}$

PBCF= Pay and Benefits Cost Factor
P= Total wages and salaries paid
BC= Benefits cost to the organization
TOC= Total operating cost of the organization (expenditures)

Issues to Consider:

1. This measure should be the focus of attention of top management.
2. You may want to consider variations such as:
   - ✍ Compensation and benefits as a percent of revenue
   - ✍ Percentage of compensation that is "non-recurring" or "at risk"
   - ✍ Cost of overtime as a percentage of pay
3. These cost trends should be compared to other similar organizations.

Cautions:

1. Analysis should be done carefully. For example, agencies with a great deal of "pass through" money may want to control for those funds and not list them as an expense to the organization.
2. Comparisons should also be made carefully. Make sure you are comparing apples to apples before conclusions are reached about your data.

Value of the Measure:

? This measure is strategic, not operational. It reflects organizational costs and trends rather than transaction efficiency or effectiveness.
? Careful analysis can help raise the visibility of the HR function.

What it won't do:

? Tell you anything about the contribution that the HR office made to the figure derived, unless you can point to specific actions taken at the suggestion of the office to control or reduce costs while not damaging organizational service quality

Measure: Benefit Costs per Employee

Formula: $BC/E = \frac{TBC}{E}$

BC/E= Benefit costs per employee
TBC= Total benefits costs*
E= Average number of employees-monthly average for a running 12 month period (e.g. March 2001-February 2002)

*** Formula for TBC is as follows: TBC = ST + OH + PC + PP + Misc.**

ST= Staff time spent on benefit administration multiplied by hourly rate
OH= Overhead expenses associated with benefit planning and administration (i.e. rent, telephone etc.)
PC= Processing costs associated with benefits program
PP= Plan payments (retirement, insurance, government mandates, external administrative payments etc.)
Misc.= vacation pay, sick leave, holidays, tuition assistance….

Issues to Consider:

1. Most information will be available from Insurance Services, but agency specific calculations may vary based on the age or experience of the workforce.
2. Most benefit costs are outside the control of individual agencies, but may be useful for budget analysis purposes.

Cautions:

1. This can only give you cost data, not help determine the right mix of benefits

Value of Measure:

- ✍ Good information for trend purposes to monitor a key component of organizational costs

What it won't do:

- ✍ Tell you the correct mix of benefits or employee satisfaction with them
- ✍ Tell you what should be done to contain costs

Measures: Workers Compensation and Employee Assistance Program Costs

Formulas: WCC= $\frac{PP + CP + AC}{E/100}$ EAPC= $\frac{PP + CP + AC}{E/100}$

WCC= Workers compensation costs
EAPC= Employee assistance program costs
PP= Premiums paid
CP= Claims paid
AC= Administrative costs
E/100= Number of employees divided by 100

Issues to Consider:

1. Both can help you keep track of key components of your benefits programs.
2. The formula can be used with other benefit programs as well.

Cautions:

1. Administrative costs need to be calculated using a percentage of staff time (salary and benefits) allocated to the programs and an appropriate amount of overhead costs.

Value of Measure:

? By calculating the costs per 100 employees (or 1000) you can reasonably compare costs with other organizations for these programs.

What it won't do:

? Reveal if benchmarked EAP plans are similar without further research.

Measure: Transaction Processing Rate (Cycle Time)

Formula: $TPR = \frac{DC}{DR}$

TPR = Transaction processing rate
DC= Date completed (e.g. October 1, 2001)
DR= Date received (e.g. September 20, 2001)

Issues to Consider:

1. Can work with any type of transaction processed in the office, from benefits changes to pay actions to claims.
2. You have to decide if you are going to calculate your cycle time based on working days or calendar days.

Cautions:

1. The measure can be manipulated by the date logging procedures used.
2. If you choose the "working days" measures, you have to adjust for holidays and weekends.
3. Some regulatory or statutory provisions may mandate the use of either working days or calendar days for a particular process (e.g. grievance response).

Value of Measure:

? Helps to identify the turnaround of documents through the office.
? Allows for comparisons with other offices and over time.
? Helps in the identification of reasonable standards for turnaround of transactions.

What it won't do:

? Analyze the error rate of transactions.
? Tell you if your transaction processing approach is a good one.

Measure: Transaction Processing Error Rate

Formula: $ER = \frac{RT}{TT}$

ER = Error rate
RT= Rejected transactions
TT= Total transactions

Issues to Consider:

1. Error rates can be done both collectively and by employee.

Cautions:

1. The complexity of the transaction needs to be considered as well as the source of the data.
2. If there is a mixture of transaction types, you may want to determine error rates for the various types to identify the source of problems.

Value of Measure:

? Helps to point out where rework is occurring in a process.
? When done in conjunction with cycle times measures, gives a good picture of efficiency in transaction processing.

What it won't do:

? Tell you anything about the pace of transaction processing.

Measure: Cost per Transaction

Formula: PC/T= $\frac{ST + OH + MP + MT}{PR}$

PC/T = Processing Cost per transaction
ST= Staff time, salary and benefits
OH= Overhead
MP= Materials and postage
MT= Management time (Cost of Supervision)
PR= Process Rate (number of items processed per hour)

Issues to Consider:

1. A time logging system is necessary if the processing is just one part of an employee's job.
2. You need to know the average volume of transactions processed per hour.
3. If transactions vary widely in complexity and occur at predictable times, you must take transaction processing time measurements at several different times to normalize fluctuations.

Cautions:

1. Overhead includes costs related to rent, telephones and other fixed costs that the employees use to do their job. For more information on "overhead" costs, see page 40.
2. This can be a very complex measure because you have to know several other measures first (supervisory costs, transaction volume, benefits costs and overhead).

Value of Measure:

? Can determine the true cost of processing transactions.
? Allows you to compare costs with other organizations.
? Helps determine if the process can be more effectively done elsewhere.

What it won't do:

? Analyze the error rate of transactions.
? Tell you if your processing rate is efficient.

Supporting Human Assets in the Organization

Measure: Orientation Costs per Employee

Formula: $OC/E = \frac{[T \times (R/h \times E)] + DC}{E}$

OC/E= Average cost to orient an employee
T= Time spent in orientation
R/h= average hourly pay rate of attending employees*
DC= HR Department cost per employee conducting orientation*
E= total number of employee oriented

*** including benefits**

Issues to Consider:

1. You can also substitute or add costs of others involved in orientation as part of DC.
2. This measure can be extended to get an organizational cost by multiplying by the number of employees by (T x R/h) and adding the direct cost of those conducting the orientation.

Cautions:

1. Requires significant calculations if many types of employees are involved with many different hourly wage levels.

Value of Measure:

? Calculates the investment in orienting new employees
? Serves as a building block number for calculating the true cost of turnover

What it won't do:

? Tell you if the orientation was effective for the employees

Measure: Meets by Default Rate

Formula: MBDR = $\frac{\text{EMBD}}{\text{TE}}$

MBDR= Meets by default rate
EMBD= Number of employees with meets by default ratings on EPMS
TE= Total number of employees in agency

Issues to Consider:

1. EPMS ratings should be up-to-date on HRIS system.

Cautions:

1. Meets by default ratings might be overstated if records are not entered in HRIS in a timely manner.

Value of Measure:

? Provides you a sense of the commitment the organization demonstrates to the performance management system.

What it won't do:

? Tell you how well the EPMS documents are being completed or how effective the process is in your agency.

Measure: Absence Rate

Formula: AR= $\frac{\text{WDL}}{\text{E x WD}}$

AR= Absence rate (monthly)
WDL= Worker days lost through absence
E= Average employee population-12 running months average (e.g. March 2001-February 2002)
WD= number of work days available

Issues to Consider:

1. Need to define "absence" to suit your needs. It may include all forms of absence, including annual leave, or just sick leave.
2. Can be tracked by department, types of employees or broken down for analysis in other ways.

Cautions:

1. Is most helpful when used in conjunction with Absenteeism costs measures.
2. Without adequate definition of "absence," it is useless for analysis.

Value of Measure:

? Good starting point for calculating the cost of lost work-days.

What it won't do:

? Tell you why people are absent, unless you break down the component parts into the various types of leave used by employees.

Measure: Absenteeism Costs

Formula: AC/E = $\frac{ML(Wh + EBC) + S(R/h=SBC) + Misc.}{E}$

AC/E= Absence cost per employee
ML= Total work hours lost for all reasons
Wh= Weighted average hourly pay level for groups*
EBC= Cost of employee benefits
S= Supervisory hours lost due to absence**
R/h= Average hourly rate for supervisors
SBC= Cost of supervisor's benefits
Misc.= Other costs (temporary help, overtime, etc.)
E= Total employees

***Weighted average (e.g., 20% hourly workers at $8.25/hr.; 50% non-exempt at $11.00/hr; 30% exempt at $16.50/hr.)**
****Based on interviews to estimate cost dealing with problems resulting from absences (rescheduling, instructing replacement, doing work for absent employees)**

Issues to Consider:

1. Highlights the hidden cost of absenteeism, including peripheral costs such as supervisory time lost.
2. You may want to back out holidays and annual leave to get a better picture of unscheduled absences when calculating ML.
3. Is absenteeism a problem in your agency? If not, this calculation may not be worth the effort.

Cautions:

1. Will require interviewing to create some cost estimates.
2. Will require considerable calculation time up front to get a baseline.

Value of Measure:

? Provides a comprehensive look at the cost of lost work hours.

What it won't do:

? Tell you why people are missing work.

Measure: Effect of Absenteeism on Labor Utilization

Formula: $U = \frac{Nh}{H}$

U= Labor utilization percentage
Nh= non-productive hours: absence, breaks, downtime, rework, etc.
H= work hours available for all employees (e.g., 40 employees x 37.5 hrs)

Issues to Consider:

1. Demonstrates the effects of lost work time.
2. Nh is an estimate based on known variables (absence and downtime) and those that must be calculated after observations and interviews (rework).

Cautions:

1. If you want to show the effect of just absence, substitute Ah (absent hours) for Nh.
2. Works best in a production environment, but can also be useful with any large group of employees that perform similar work.

Value of Measure:

? Can help determine needed staffing levels if standards for work production are available.

What it won't do:

? Tell you how effectively the "productive" hours are used, unless you assume that all workers produce approximately the same amount of useful work.

Measures: Accession Rate and Separation Rate

Formulas: $AR = \frac{H}{e}$ $SR = \frac{NT}{e}$

AR= Accession rate
SR= Separation rate
H= Number hired during period of time
NT= Number terminated during period
e= Average employee population during period

Issues to Consider:

1. Very easy to calculate and readily available figures for most organizations.
2. Use "accessions" to indicate new hires, not promotions or transfers.
3. Use "separations" to indicate quits, RIFs, and discharges-this can be broken down even further into voluntary and involuntary separations.

Cautions:

1. These measures only track movement into and out of your organization, not the value of those that move in and out.

Value of Measure:

? These measures are the basis for all good descriptive measures of turnover.

What it won't do:

? Tell you why people separate voluntarily.
? Break out other factors such as length of service of those separated, separation by work area or demographic group.

Measures: Workforce Stability and Workforce Instability Factors

Formulas: SF = $\frac{OS}{E}$ IF = $\frac{OL}{E}$

SF= Stability Factor
IF= Instability Factor
OS= Original employees who remain for the period (e.g., 1 year)
OL= Original employees who left during the period (e.g., 1 year)
E= Employee population at the beginning of the period

Issues to Consider:

1. Extremely helpful for workforce planning purposes. Can also help you determine the experience lost resulting from separations.
2. Can be adjusted to create SR (Survivor Rate) and LR (Loss Rate) when new hires are substituted for original employees in the equation.
3. Easy to measure from HRIS data.

Cautions:

1. The period analyzed should reflect a meaningful time frame for your organization. For example, if it takes three years to train someone, a one year analysis might not be that helpful.

Value of Measure:

? A measure essential to understanding the stability of the workforce.
? Can be broken down into sub-categories to look at different types of jobs as well.

What it won't do:

? Reveal the reasons for stability or instability.

Measure: Turnover/Performance Relationships

Formula: $PT = \frac{R}{L}$ $PT = \frac{R}{TR}$

PT= Percent terminating at each performance level
R= Number rated at each level
L= Total number terminating
TR=Total rated at a given level (e.g., meets requirements)

Issues to Consider:

1. Can be done for the organization as a whole or by job type.
2. Multi-dimensional analysis allows for comparing two variables, performance ratings and turnover. This can be very helpful with analysis of voluntary turnover.

Cautions:

1. Subject to vagaries of EPMS evaluations and rater differences.
2. Best used in combination with other analytical measures of turnover.

Value of Measure:

? Allows for comparative analysis of the employees who leave and those who remain in terms of performance.
? Can be graphed easily and compared to other variables.

What it won't do:

? Tell you the reasons for voluntary terminations.

Measure: Turnover Costs

Formula: TC = DHC + IHC + DIRC + IIRC

TC= Turnover costs
DHC= Direct hiring costs
IHC= Indirect hiring costs
DIRC= Direct internal replacement costs
IIRC= Indirect internal replacement costs

Issues to Consider:

1. Can be used as a standard cost or by level or type of job.
2. All of the factors must be analyzed separately to determine what should be included in the calculation. Some suggestions include:

   DHC= (advertising costs, search fees, applicant expenses, relocation expenses, salary and benefits of recruitment staff, recruitment function overhead*)
   IHC= (management time per hire, supervisor time per hire, orientation and training per hire, productivity loss per hire)
   DIRC= (applicant expenses, relocation expenses, salaries and benefits of recruitment staff, recruitment function overhead*)
   IIRC= (management time per hire, supervisor time per hire, orientation and training per hire, productivity loss per hire)

   *For more information on "overhead", see page 40.

Cautions:

1. Can be a time consuming process to develop a formula, but should be well worth it.
2. Can be difficult to get a good estimate of productivity loss. Ask supervisors, or employees who were hired within the last year, to help estimate.

Value of Measure:

? Helps determine the true cost of turnover to the organization.

What it won't do:

? Give you a precise measure of all the effects of turnover and lost knowledge.

Measure: Incidence of Complaints or Grievances by Group

Formula: None – Cost data should be kept in a matrix format

Cost/ /Issue	Question	Problem	Grievance	Mediation/ Arbitration	**Total**
Direct Expenses					
ER Staff Time					
Employee/ Supervisor Time					
Materials/ Equipment					
Other					
Total					

Issues to Consider:

1. Calculating the cost can best be done by evaluating the actual costs of each incident. Since each situation is likely to be somewhat unique, the real value is in the lessons learned from each incident.
2. Prevention costs can be calculated by getting a baseline for each grouping and plotting costs over time. Cost-savings are the incidents avoided.

Cautions:

1. Internal definitions of "question" and "problem" should be created and you should probably track them by topic.
2. Most of the costs encountered are time related, but the settlement of a problem may include buying a new piece of equipment, so all factors should be considered.

Value of Measure:

? Creates a cost-avoidance measure for the HR function.

What it won't do:

? Provide a simple mechanism for evaluating the ER function.

Measure: Employee Satisfaction

Formula: Employee Survey Results

For a sample employee survey see:
http://www.state.sc.us/ohr/workforce01/Toolkit.doc

Issues to Consider:

1. Is your organization generally stable in terms of leadership and structure? If you are not going through major organizational change, you may want to do a survey.
2. Approaches other than surveys are also available to gauge satisfaction. Measures of absenteeism, turnover and complaints provide some insight as well.
3. Surveys can be risky, if the organization is not prepared to respond to issues revealed by the staff.

Cautions:

1. Do not do an employee satisfaction survey unless your organization has already developed a process for responding to the survey results, including but not limited to, the sharing of the survey results with employees.
2. The survey design and administration should be done with professional assistance to ensure that the best results are achieved.

Value of Measure:

? Provides you a sense of the state of mind of agency employees about issues influencing satisfaction and retention.

What it won't do:

? Tell you how to remedy the problems encountered.

Measures: Employee Suggestions for Improvement

Formulas: $ES = \frac{TS}{E/100}$ $SS = \frac{TSS}{TS}$

ES= Employee suggestions per 100 employees
TS= Total number suggestions
E/100= Total number of employees divided by 100
SS= Savings per suggestion
TSS= Total savings resulting from suggestions

Issues to Consider:

1. If your organization has a formal employee involvement or suggestion program, these measures are absolutely essential.
2. These measures can indicate the impact of employee involvement in the agency.

Cautions:

1. If your organization does not have a formal suggestion program, these measures should be used reluctantly, especially for comparative purposes.

Value of Measure:

? Provides an indication of the impact of employee involvement in the organization.

What it won't do:

? Tell you if your process for evaluating or implementing suggestions is effective. You may also want to measure the cycle time of suggestion evaluation from the point of submission to action determination.

Measure: Employee Recognition Rate

Formula: $ERR = \frac{IERR}{TE}$

ERR= Employee recognition rate
IERR= Individual employees receiving recognition
TE= Total number of employees

Issues to Consider:

1. The formality of your agency's employee recognition system will determine your ability to use this measure.
2. You may choose to break this measure down into the various types of recognition provided by your agency.

Cautions:

1. The best approach to using this measure is to count the number of employees who have received any given level of recognition over a period of time. Alternately, you may choose to count the incidences of recognition given, regardless of how many employees actually received them.

Value of Measure:

? Provides information on the depth (or breadth) of the issuance of formal recognition to employees in the organization.

What it won't do:

? Tell you if the recognition program is effective at reinforcing desired behaviors.
? Tell you if employees find the recognition system satisfying.

Measure: Cost per Trainee

Formula: C/T = $\frac{CC + TR + S + RC + T\&L + TS + PS + OH}{PT}$

C/T= Cost per trainee
CC= Consultant costs (if used to develop or customize training)
TR= Training room rental
S= Supplies and materials, including participant workbooks
RC= Refreshments
T&L= Travel and lodging
TS= Trainers' salary and benefits
PS= Participants salary and benefits
OH= Overhead allocated from training department
PT= People trained

Issues to Consider:

1. Not all costs are applicable to all types of training, so while the formula is long, your organization may not incur some of the costs.
2. Spreadsheets are probably the best method for keeping this type of data.

Cautions:

1. This model was designed to capture data from classroom-type training. If other learning experiences (e.g., on-line training or self-paced study) are used, different formulas may be required.

Value of Measure:

? Gives an accurate representation of the true costs of providing training.
? Can easily be converted to an hourly cost by using the following formula:

$$C/Th = \frac{TC}{PT \times Th}$$

C/Th= Cost per training hour
TC= Total cost (numbers from top line of formula above)
PT= Number trained
Th= Hours of training

What it won't do:

? Tell you if the training was effective or if the participants learned anything.

Measure: Training Expenditures as a Percentage of Personal Service Expenditures

Formula: TEPS = $\frac{DTC + ST + T + L + M + ST + OH}{TS}$

TEPS= Training expenses as a percentage of personal services expenditures
DTC= Direct training costs (registration/course fees, materials, room rental)
ST= Salaries and benefits of trainers (or instructor fees)
T= Travel
L= Lodging
M= Meals
ST= Staff time (salary and benefits)
OH= Overhead of training department (usually allocated by time)
TS= Total salaries and benefits paid to all employees

Issues to Consider:

1. Not all values will apply to each training session. This formula can be calculated on a per class basis or done for a period of time for all classes.
2. This formula works best for training conducted in a classroom-type setting, other formulas would need to be developed for other developmental opportunities. However, most would be similar in construction to the one above.

Cautions:

1. This formula does not include the time spent on course design, development and revision. If your organization has an in-house training function, those costs should be added to the numerator of the equation.
2. Tuition assistance paid to employees should be considered a direct training cost.

Value of Measure:

? Provides a strategic picture of the investment made in the development of your agency's workforce.
? Allows for comparison with other agencies and organizations.

What it won't do:

? Tell you what the optimum level of training expenditure is for your agency

Measure: Training and Development Plan Factor

Formula: $TDPF = \frac{ETDP}{TE}$

TDPF= Training and Development Plan Factor
ETDP= Employees with up-to-date training and development plans
TE= Total number of employees

Issues to Consider:

1. The goal should be that each employee has a current training and development plan.
2. Standards need to be developed to establish the definition of "up-to-date" and what elements each plan should include.

Cautions:

1. Having a current plan is only an indicator of intent by the organization to develop the individual. Other measures are needed to evaluate how well the development is progressing.

Value of Measure:

? Provides a process measure that is a leading indicator of future costs of training and development when used in conjunction with other measures.

What it won't do:

? Tell you how well the plan indicates the developmental needs of the individuals.

Measure: Skill Change resulting from Training

Formula: $SC = \frac{SA}{SB}$

SC= Observable change in skills as a result of training
SA= Skills demonstrated after training
SB= Skills demonstrated before training

Issues to Consider:

1. Prior to training, a baseline of skill proficiency needs to be established for a participant, based upon work output, critical incidents of interpersonal relations, or other observable phenomena.
2. Data can be gathered in many ways including questionnaires, interviews, demonstrations or observations.

Cautions:

1. Skills need to be specifically enough to allow for measurement. Vague explanations are insufficient.
2. Do not confuse a skill change with "Knowledge Change."

Value of Measure:

? Helps organizations pinpoint training that does the best job of improving skills.
? Can be converted to measure "Knowledge Change" by substituting "knowledge" for "skill" in the formula. Remember, skill changes reflect the ability of an individual to translate the knowledge of how to do something into action.

What it won't do:

? Tell you if the method you are using is the most efficient way of producing skill change. Cost data is required to do that analysis.

Measure: Impact and Value Evaluation of Training

Formula: Requires following a seven-step process outlined below

1. **Study the business problem or opportunity by looking for its source and the factors influencing it.**
2. **Decide if training might contribute to the resolution of the problem.**
3. **If training is deemed to be part of the solution, design and deliver it in a skill-based format that is visibly linked to the business problem.**
4. **Monitor performance on the job after the training. Identify other variables that may have influenced the outcomes.**
5. **Measure the impact of using before and after skill measures for comparison.**
6. **Discuss with appropriate individuals to determine if the impact measured could be attributed to other variables.**
7. **Calculate the value of the impact in monetary, or human terms, or both.**

Issues to Consider:

1. The relationship between change and impact is one of value. They are sequential measures along a continuum. For example, if someone demonstrates improved skill, and they apply the skill appropriately on the job, you should be able to measure the impact it had on the desired outcome you were trying to achieve. Greater impact indicates greater value created.
2. Doing a good job of analysis of the business problem can be difficult. Many people do not do an adequate job of that analysis, and, as a result, design ineffective training or apply a training solution to a problem better solved using other approaches.
3. The value of the impact can only be calculated in terms of what outcomes you were trying to achieve, so no formula is available.

Cautions:

1. Be sure to appropriately diagnose the problem initially and make sure that training is the best way of solving the problem.
2. These measures can be used over time with large scale training efforts, but sufficient time needs to be given to establishing baseline skill data.

Value of Measure:

? To evaluate the impact of training on the organization's ability to achieve desired outcomes.

What it won't do:

? Provide return on investment figures, but it comes close.

Overhead

One of the most frequently overlooked factors when attempts are made to determine the actual cost of a function is overhead. Overhead refers to the hidden costs of providing a service or performing a task. For example, a staff dedicated to recruiting new employees would likely consume office space (rent), telephones, computers, furniture, copier rental and other tangible goods during the course of their work. These costs need to be considered as part of investment made in doing business.

Many of these fixed costs can be allocated across the entire organization, by head count, function or some other means. For example, you may want to determine the square footage of the space allocated to the compensation function in your agency and multiply it by your rental fee to determine the cost of the office space that adds to the cost of running the compensation function.

If your staff members are generalists, performing many HR functions, you may wish to calculate your overhead by combining all of the costs (rent, telephones, copier rental, equipment, etc.) and dividing that by the number of staff members. After that you can determine what percentage of time the staff spends on various functions and allocate the costs based upon those percentages. For example, $10,000 in costs multiplied by 25% recruitment, 35% compensation, 30% employee relations and 10% HRIS to determine where the overhead allocation belongs.

In some cost accounting methodologies, the salaries, benefits and overhead associated with management of the organization is also allocated down to the functions where services are delivered. You probably don't need to go to that level of detail for your measurement purposes unless your entire organization is determining the costs of all services.